

IN THE CLAIMS:

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1. (Currently Amended) A solid-state imaging element, comprising:
unit pixels, arranged in a matrix ~~form~~, each of which have a photoelectric conversion
~~transfer element elements~~, a transfer switch ~~switches~~ for transferring charge ~~charges~~ stored in
said photoelectric conversion element ~~transfer elements~~, a charge store part ~~parts~~ for storing
~~charges~~ charge transferred by said transfer switch ~~switches~~, a reset switch ~~switches~~ for
resetting said charge store part ~~parts~~, and an amplifying element ~~elements~~ for outputting
~~signals~~ a signal in accordance with ~~the~~ a potential of said charge in said charge store part
~~parts~~ to vertical signal lines;

a vertical scanning circuit for selecting pixels in units of rows by controlling a reset
potential ~~afforded~~ applied to selected ones of said reset switches;

a horizontal scanning circuit for sequentially selecting signals output to said vertical
signal lines ~~in units of columns~~; and

an output circuit for outputting signals selected by said horizontal scanning circuit ~~via~~
~~horizontal signal lines~~.

2. (Currently Amended) A solid-state imaging element as claimed in claim 1,
wherein said vertical scanning circuit ~~affords~~ applies vertical selection pulses sequentially
output during vertical scanning to said reset switches as a reset potential thereof.

3. (Original) A solid-state imaging element as claimed in claim 1, wherein said charge store part is floating diffusion.

4. (Currently Amended) A solid-state imaging element as claimed in claim 1, wherein said reset switches ~~comprise a~~ are depression type ~~transistors~~ transistor.

5. (Original) A solid-state imaging element as claimed in claim 1, wherein said output circuit outputs signals read into said vertical signal lines in voltage mode.

6. (Original) A solid-state imaging element as claimed in claim 1, wherein said output circuit outputs signals read into said vertical signal lines in current mode.

7. (Currently Amended) A solid-state imaging element as claimed in claim 1, wherein said unit pixels include an overflow path between said photoelectric conversion ~~transfer~~ element and an area to which a pixel source voltage is applied ~~afforded~~, said overflow path being used to discharge excess charges of said photoelectric conversion ~~transfer~~ element.

8. (Currently Amended) A solid-state imaging element as claimed in claim 1, wherein a negative potential is applied to the control electrode of each of said transfer switches.

9. (Previously Canceled)

10. (Previously Canceled)

11. (Previously Canceled)

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12. (Currently Amended) A method for driving a solid-state imaging element which includes including unit pixels, arranged in a matrix form, each of which have a photoelectric conversion element ~~transfer elements~~, a transfer ~~switches~~ switch for transferring ~~charges~~ charge stored in said photoelectric conversion element ~~transfer elements~~, a charge store ~~parts~~ part for storing ~~charges~~ charge transferred by said transfer switch ~~switches~~, a reset switch ~~switches~~ for resetting said charge store part ~~parts~~, and an amplifying element ~~elements~~ for outputting ~~signals~~ a signal in accordance with ~~the~~ a potential of said charge store part ~~parts~~ to ~~vertical signal lines~~, said method comprising the step of:

selecting pixels in units of rows by controlling a reset potential applied ~~afforded~~ to selected ones of said reset switches.

13. (Original) A method for driving a solid-state imaging element as claimed in claim 12, further comprising the step of:

outputting signals read into said vertical signal lines in voltage mode.

14. (Original) A method for driving a solid-state imaging element as claimed in claim 12, further comprising the step of:

outputting signals read into said vertical signal lines in current mode.

15. (Currently Amended) A camera system using a solid-state imaging element as an imaging device, said solid-state imaging element, comprising:

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unit pixels, arranged in a matrix form, each of which have a photoelectric conversion element ~~transfer elements~~, a transfer switch ~~switches~~ for transferring ~~charges~~ charge stored in said photoelectric conversion element ~~transfer elements~~, a charge store part ~~parts~~ for storing ~~charges~~ charge transferred by said transfer switch ~~switches~~, a reset switch ~~switches~~ for resetting said charge store part ~~parts~~, and an amplifying element ~~elements~~ for outputting ~~signals~~ a signal in accordance with ~~the~~ a potential of said charge store part ~~parts~~ ~~to vertical signal lines~~;

a vertical scanning circuit for selecting pixels in units of rows by controlling a reset potential ~~afforded~~ applied to selected reset switches ~~said reset switch~~;

a horizontal scanning circuit for sequentially selecting signals output to said vertical signal lines in units of columns; and

an output circuit for outputting signals selected by said horizontal scanning circuit ~~via horizontal signal lines~~.

Please add the following new claims:

16. (Newly Added) The solid-state imaging element of claim 1, wherein a falling edge of the reset pulse triggers reading of a reference level.

17. (Newly Added) The solid-state imaging element of claim 1, wherein a changing state of the reset pulse and a selection pulse initiates a pixel reading operation.

18. (Newly Added) The method of driving a solid-state imaging element of claim 12, further comprising triggering reading of a reference level with a falling edge of the reset pulse.

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19. (Newly Added) The method of driving a solid-state imaging element of claim 12, wherein a changing state of the reset pulse and a selection pulse initiates a pixel reading operation.

20. (Newly Added) The camera system of claim 15, wherein a falling edge of the reset pulse triggers reading of a reference level.

21. (Newly Added) The camera system of claim 15, wherein a changing state of the reset pulse and a selection pulse initiates a pixel reading operation.
